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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,445	06/29/2001	Yoshifusa Togawa	122.1222RE	6318
21171 7590 01/05/2011 STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER ELISCA, PIERRE E	
			ART UNIT 3718	PAPER NUMBER
			MAIL DATE 01/05/2011	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

09/893,445

**Applicant(s)**

TOGAWA ET AL

**Examiner**

Pierre E. Elisca

**Art Unit**

3718

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 67, 75, 79, 84, 94, 109 and 145-156 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 67, 75, 79, 84, 94, 109 and 145-156 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Page No(s)/Mail Date 9/21/10, 9/22/10, 5/18/09

**DETAILED ACTION**

1. This communication is in response to Applicant's RCE filed on 07/22/2010.
2. Claims 67, 75, 79, 84, 94, 109 and 145-153 remain pending and have been examined. Claims 154-156 have been added.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 67, 75, 79, 84, 94, 109 and 145-156 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Cozza (U.S. Pat. No. 5,502,815) in view of Computergram International, November 28, 1989.

As per claims 67, 75, 79, 84, 94, 109 and 145-156 Arnold discloses a method/apparatus for increasing the speed at which computer viruses are detected stores initial state information concerning the file or volume which is being examined for a virus. This information is stored in a cache in a non-volatile storage medium and when files are subsequently scanned for viruses, the current state information is compared to the initial state information stored in the cache. Please note that the file can be infected with virus or without virus, the system comprising:

A virus scanner scanning a file stored in a storage device for infection with a virus, a quarantining device quarantining the file from non-infected files on the storage device, when the file is infected (see., abstract, col 1-col 5. Please note that the limitation of quarantining the file is readable as isolating the infected virus see., Arnold in col 7, lines 3-8, specifically wherein said if one or more decoy programs is subsequently found to have changed from the original, protected version, it can be assumed that the changes are due to a virus. A comparison of each modified decoy program with its corresponding uninfected version enables a copy of the virus to be isolated from each decoy).

As per the limitation of converting device converting the quarantined file into encoded data is also disclosed by Arnold in col 1, lines 45-63, specifically wherein said converting the binary machine code of the virus (or infected viruses) to an assembler version, analyzing the assembler code, selecting sections of code that appear to be unusual or virus like..).

**Arnold fails to explicitly disclose the limitation of encoding the infected file and stored in another storage area. Computergram International discloses a back-up software and hardware also automatically detect and isolate computer virus, and, by compressing and encrypting them, renders them harmless (see., page 1).**

**Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the computer virus of Arnold by including the limitation detailed above as taught by Computer gram International because this would prevent copies of being damaged when a file is loaded into memory or storage area.**

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 67, 75, 79, 84, 94, 109 and 145-156 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Arnold et al. (U.S. Pat. No. 5,440,723) in view of Cozza (U.S. Pat. No. 5,502,815).

As per claims 67, 75, 79, 84, 94, 109 and 145-156 Arnold discloses a periodic monitoring of a data processing system for anomalous behavior that may indicate the presence of an undesirable software entity such as a computer virus (which is readable as Applicant's claimed invention wherein said a data processing system which has the ability to deal with infection of a file with a virus), the system comprising:  
A storage device storing files (see., abstract, fig 1A, items 24 and 26, col 3, lines 49-68);  
A virus scanner adapted to scan a file stored in a storage device for infection with a virus (see., col 1, lines 45-68, col 2, lines 1-11, col 5, lines 29-45); and the limitation of converting device converting the quarantined file into encoded data when the infected file is detected is also disclosed by Arnold in col 1, lines 45-63, specifically wherein said converting the binary machine code of the virus (or infected viruses) to an assembler version, analyzing the assembler code, selecting sections of code that appear to be unusual or virus like..).

**Arnold** fails to explicitly disclose the limitation wherein said saving or storing a detected virus-infected file into a specific area within said storage device. However, Cozza a method/apparatus for increasing the speed at which computer viruses are detected stores initial state information concerning the file or volume which is being examined for a virus. This information is stored in a cache in a non-volatile storage medium and when files are subsequently scanned for viruses, the current state information is compared to the initial state information stored in the cache (see., abstract, col 1-col 5. Please note that the file can be infected with virus or without virus). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the computer virus of Arnold by including the limitation detailed above as taught by Cozza because this would increase the speed at which a computer can scan for the presence of a computer virus.

Arnold and Cozza fail to disclose the limitation of: **of encoding the infected file and stored in another storage area. Computergram International discloses a back-up software and hardware also automatically detect and isolate computer virus, and, by compressing and encrypting them, renders them harmless (see., page 1). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Arnold and Cozza by including the limitation detailed above as taught by Computer gram International because this would prevent copies of being damaged when a file is loaded into memory or storage area.**

## **RESPONSE TO ARGUMENTS**

7. Applicant's arguments with respect to claims 67, 75, 79, 84, 94, 109 and 145-156 have been fully considered but they are moot in view of new ground (s) of rejection.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre E. Elisca whose telephone number is 571 272 6706. The examiner can normally be reached on 6:30 to 5:00. Hotelier.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571 272 4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Pierre E. Elisca/  
Primary Examiner, Art Unit 3718